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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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August 21, 1989

Mr. Richard R. Johnston
Plant Manager
Chemstar, Inc.
P.O. Box 537
Grantsville, Utah 84029

Dear Mr. Johnston:

Re: ***Review of Notice of Intention to Commence Large Mining Operations, Grantsville Quarry, M/045/028, Tooele County, Utah***

The Division has completed its initial review of your permit application, received July 7, 1989, for Chemstar, Incorporated's Grantsville Quarry. The application cannot be determined complete at this time. We request that the following information be provided to enable us to complete our technical review and proceed toward tentative approval:

TECHNICAL DEFICIENCIES: (Identified by rule number and section)

R613-004-104 Operator(s), Surface and Mineral Owner(s)

It is our understanding that the operator has failed to list all surface and mineral owners of the land to be affected by the mining operations. Any surface or mineral leases obtained from State or Federal land managing agencies must be properly identified as part of the permit application.

R613-004-105 Maps, Drawings & Photographs

-105.2.12, Page 3, Section II., #2(b) - All disturbed areas were not properly ***outlined*** within a disturbed area boundary designation (e.g., the surface facilities/processing plant area). The operator must clearly outline the entire disturbed area boundary on the surface facilities map.

All the access/haul roads, pits, pads, topsoil stockpiles, processing facilities (warehouses, offices, shops, crushers, conveyors, baghouse, etc.), waste disposal areas, ore stockpiles, etc., that are being used or were constructed as part of the mining/milling operation should be ***labelled*** on the surface facilities map. A numbering sequence which references a map key or an itemized table, could be used to identify these structures/facilities.

The ***pre-law*** (pre-1975) surface disturbances should also be designated on this map. The operator will not be held responsible for reclamation of the pre-law areas, provided no further use has been made, or will be made, of these areas.

The number of disturbed acres, by area, should be indicated on the map as well. A map key could be color coded or otherwise labelled to distinguish different types of areas.

-105.3.15, Page 5, Section III, #14 - The operator has indicated that there were no engineering design drawings generated prior to actual construction of the wastewater/drainage control pond. Consequently, the Division requests that the operator provide a pond maintenance plan which includes provisions for routine cleanout and proper disposal of the impounded sediments. The intent is to insure that an adequate water and sediment storage volume is maintained in the pond at all times during its operational life.

-105.3.17 - A reclamation treatment map which identifies those areas which will, or will not, be subject to reclamation upon cessation of mining operations must be submitted.

R613-004-106 Operation Plan

-106.2 - The operator must provide the Division with a soil analysis of the typical overburden or waste material. The analysis would be used to determine the quality of such material for revegetation.

The Division recommends that the soils and/or waste overburden material (i.e., fines) be analyzed for the parameters as outlined on Attachment A.

-106.3 - Please provide the projected 5-year mine development sequence which includes any additional surface disturbance anticipated. Any known mine plan or processing plant changes anticipated within the next 5-year timeframe should also be included as part of this permit application.

-106.5, Page 4 & 5, Section III, #5 & 17 - The operator indicates that no salvageable soil exists on areas to be mined. The Division concurs with this observation and will grant a variance for these areas.

Is this also true for areas where wastes are to be stored or additional support facilities development is likely to occur? If so, the operator will also need to request a topsoil variance for these areas also, and provide the Division with a description of the area and why soil salvage is not possible.

The operator is required to salvage soil material were it exists and is accessible, before any type of surface disturbance occurs. If sufficient soil material cannot be found on areas to be disturbed, then the operator might consider identifying and including borrow areas as part of the reclamation plan. Substitute plant growth medium may also be a viable alternative for use in supporting revegetation efforts upon final reclamation (i.e., rejected processing waste and fines material).

-106.6 - If area soils are determined salvageable, the operator must provide a plan which describes how they will be collected, stockpiled, protected from erosion, and redeposited.

-106.7, Page 5, Section III, # 16 - The operator has failed to provide adequate detail on the vegetation survey performed at the minesite. The Division will complete this vegetation survey information for the operator based upon data gathered during our August 15, 1989 field inspection.

-106.8, Page 4, Section III, #4 - Are there any wells located within the general vicinity of the mine and/or processing facilities area? If so, what is the basic water quality of water obtained from these wells? A laboratory analysis of the local ground water quality is requested. Has (will) any ground water been intercepted by the quarrying operation? Will the quarry impound water upon final reclamation or will it be non-impounding and self-draining?

Page 5, Section III, #15 - Please describe the water quality in the wastewater pond? Are there any analytical results of water quality taken from the processing waste water? What chemicals or wastes are added to the processing water before it is discharged to the wastewater impoundment?

R613-004-107 - Operation Practices

-107.6 - Does the operator have any plans for concurrent reclamation? If not, such plans should be incorporated into the mining and reclamation plan.

R613-004-109 Impact Assessment

-109.4 - Public health and safety issues associated with the open pits and steep highwalls that may remain upon cessation of mining need to be addressed by the operator. The reclamation plan should describe how the operator will protect the public from, or minimize their exposure to, these hazardous areas during and following mining operations.

R613-004-110 Reclamation Plan

-110.1 - Page 7, Section V - The application fails to indicate a postmining landuse for the mining area. The operator needs to substantiate the postmining landuse and develop a mining and reclamation plan oriented toward achieving that ultimate goal. None, under item #2 of this section, cannot be accepted by the Division.

An area may be returned to its premining landuse(s) unless another use is proposed and approved as part of the permit application. Typical postmining landuses may include: rangeland, grazing (livestock and/or wildlife), recreational, industrial/commercial, etc.

-110.2 - The operator must provide the Division with information concerning the anticipated final grade, slope contour and configuration of the quarry/pits, waste dumps, and overburden disposal areas. Unless the variances for slopes and revegetation are requested and approved, the Division will require that these areas be reclaimed to the 70% revegetation standard.

-110.3 - The application must indicate which, if any, of the roads, pits, pads, utilities, and/or other associated surface facilities will remain upon final reclamation. These areas should be outlined in the text of the reclamation plan and on the reclamation treatment map requested under R613-004-105 above.

What are the reclamation provisions for the powerlines, poles and natural gas pipelines following closure of the minesite? If these facilities will become the responsibility of another entity, then a letter must be provided to the Division from said entity confirming assumption of this liability.

The application indicates that an "underground unit" may remain following reclamation of the minesite. Please clarify what comprises this/these "underground unit(s)"?

All transformers on the minesite must be either labelled as being non-PCB, or have testing performed to determine PCB concentrations. This information is necessary in determining ultimate disposal costs during final reclamation.

-110.4 - The operator must characterize the materials comprising the Process Wastes Dump and indicate how this area will be reclaimed acknowledging any potential deleterious nature of this material.

How will the wastewater facility be reclaimed. The reclamation plan must address proper disposal of any potential deleterious material that it may/will contain.

R613-004-111 - Reclamation Practices

-111.3 - The operator will be required to revegetate the areas disturbed. No seed mixture or revegetation plan has been provided. The Division will require that all disturbed areas be revegetated unless variances for specific areas are requested and approved. The operator may be required to reseed certain areas where a variance has been granted, but not be required to meet the 70% revegetation standard. If the operator requests it, the Division will provide a recommended revegetation plant species list.

R613-004-112 - Variances

The operator must evaluate the present state of mining operations, contrast its condition with the mining and reclamation standards, then indicate which variances are desired and provide justification for requesting the same as part of the permit application. Based upon our recent onsite inspection, it appears that variances for topsoil salvaging and highwalls may be warranted for the quarrying-related disturbances at a minimum.

Thank you for your cooperation in completing this permitting action. Please contact D. Wayne Hedberg of my staff should you have questions pertaining to the requirements as outlined in this letter.

Sincerely,

Lowell P. Braxton
Associate Director, Mining

DWH/jb
Attachments
cc:Wayne Hedberg
Holland Shepherd
Scott Johnson
MN3/58-62

ATTACHMENT A

Recommended Soil Parameters for Evaluation
on
Overburden and Native Soils

1. pH
Saturation Percentage
Soil Texture
Electrical Conductivity (EC)
Sodium Absorbtion Ratio (SAR)
Nitrate Nitrogen
Phosphorous
Potassium
Acid-Base Potential (for Overburden only)
Alkalinity

MN4/164